

IN THE CLAIMS:

Claims 1-20 (canceled)

21. (currently amended) A power selection system for use with a reconfigurable circuit, comprising:

a monitoring circuit configured to determine a transition rate of at least one node located within said reconfigurable circuit; and

a mode selection circuit coupled to said monitoring circuit and configured to reconfigure said reconfigurable circuit by altering ~~alter~~ a power characteristic applied to at least a portion thereof ~~of said reconfigurable circuit~~ based on a comparison between said transition rate and a predetermined operating range.

22. (previously presented) The power selection system as recited in Claim 21 wherein said monitoring circuit comprises a switching counter configured to determine said transition rate.

23. (currently amended) The power selection system as recited in Claim 21 wherein said altering mode selection circuit is configured to alter said power characteristic is performed by ~~performing~~ an action selected from the group consisting of:

removing power to ~~powering-down~~ said at least a portion of said reconfigurable circuit,

applying power to ~~powering-up~~ said at least a portion of said reconfigurable circuit,

enabling said at least a portion of said reconfigurable circuit, and

disabling said at least a portion of said reconfigurable circuit.

24. (previously presented) The power selection system as recited in Claim 21 wherein said monitoring circuit further comprises at least one edge detection circuit configured to

determine a voltage change in said at least one node and said transition rate is based on said voltage change.

25. (previously presented) The power selection system as recited in Claim 22 further comprising a timing counter configured to track a period of operation of said reconfigurable circuit and said switching counter is configured to employ said period of operation to determine said transition rate.

26. (previously presented) The power selection system as recited in Claim 21 wherein said mode selection circuit comprises a sample and hold circuit coupled to two voltage comparators.

27. (previously presented) The power selection system as recited in Claim 21 wherein said reconfigurable circuit comprises a Pseudo Random Binary Sequence (PRBS) generator.

28. (currently amended) A method of operating a reconfigurable circuit, comprising:
determining a transition rate of at least one node located within said reconfigurable circuit; and

reconfiguring said reconfigurable circuit by altering a power characteristic applied to at least a portion thereof ~~of said reconfigurable circuit~~ based on a comparison between said transition rate and a predetermined operating range.

29. (previously presented) The method as recited in Claim 28 wherein said determining includes aggregating a number of switching transitions associated with said node.

30. (currently amended) The method as recited in Claim 28 wherein said altering includes performing at least one action selected from the group consisting of:

removing power to ~~powering down~~ said at least a portion of said reconfigurable circuit,
applying power to ~~powering up~~ said at least a portion of said reconfigurable circuit,

enabling said at least a portion of said reconfigurable circuit, and
disabling said at least a portion of said reconfigurable circuit.

31. (previously presented) The method as recited in Claim 28 wherein said determining said transition rate is based on a number of voltage changes in said at least one node.

32. (previously presented) The method as recited in Claim 29 further comprising tracking a period of operation of said reconfigurable circuit and employing said period of operation when determining said transition rate.

33. (previously presented) The method as recited in Claim 28 further comprising sampling and holding an analog representation of said transition rate and comparing a sample of said analog representation to said predetermined operating range.

34. (currently amended) A reconfigurable circuit, comprising:
a monitored sub-circuit, including:

a delay element, associated with a node of said reconfigurable circuit, having a switch;

a multiplier interposed between said node and an output of said reconfigurable circuit; and

a power selection system, including:

a monitoring circuit that determines a transition rate of said node; and

a mode selection circuit coupled to said monitoring circuit that reconfigures said monitored sub-circuit by altering ~~alters~~ a power characteristic applied thereto ~~to said monitored sub-circuit~~ based on a comparison between said transition rate and a predetermined operating range.

35. (previously presented) The reconfigurable circuit as recited in Claim 34 wherein said monitored sub-circuit comprises a plurality of delay elements, associated with a respective node of said reconfigurable circuit, having a corresponding switch and a plurality of multipliers interposed between said one of said nodes and said output of said reconfigurable circuit, said monitoring circuit determines a transition rate associated with at least one of said nodes.

36. (previously presented) The reconfigurable circuit as recited in Claim 34 wherein said transition rate is based on a total number of switching transitions associated with said switch within a period of operation of said reconfigurable circuit and said monitoring circuit comprises a switching counter that determines said number of said switching transitions.

37. (currently amended) The reconfigurable circuit as recited in Claim 34 wherein said ~~altering mode-selection circuit alters~~ said power characteristic is performed by ~~performing~~ an action selected from the group consisting of:

removing power to ~~powering-down~~ said at least a portion of said reconfigurable circuit,

applying power to ~~powering-up~~ said at least a portion of said reconfigurable circuit,

enabling said at least a portion of said reconfigurable circuit, and

disabling said at least a portion of said reconfigurable circuit.

38. (previously presented) The reconfigurable circuit as recited in Claim 34 wherein said monitoring circuit further comprises at least one edge detection circuit configured to determine a voltage change in said node and said transition rate is based on said voltage change.

39. (previously presented) The reconfigurable circuit as recited in Claim 34 wherein said mode selection circuit comprises a sample and hold circuit coupled to two voltage comparators.

40. (previously presented) The reconfigurable circuit as recited in Claim 34 wherein said monitored sub-circuit is selected from the group consisting of:
a Pseudo Random Binary Sequence (PRBS) generator, and
a filter circuit.